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10/802,682	03/17/2004	Akira Asakura	13735 US1 (C038435/010970)	9826
7590 08/19/2008				
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EXAMINER				
WALICKA, MALGORZATA A				
ART UNIT		PAPER NUMBER		
1652				
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08/19/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

The examiner acknowledges the Response after final rejection filed July 7, 2008.

Claims 1, 2, 3, 20-22 and 30-31 are amended. New claims 32-39 are added. However, the amendment has not been entered because it raises new matter issues..

ADVISORY ACTION

Written description

Claims 1, 30, and 31 have been amended to recite "95% identity to SEQ ID NO: 8". The disclosure nowhere recites this limitation. **The amendment introduces a new matter to the claims.**

In their Remarks, on page 7, applicants state that page 34, line 1, page 53 line 5; page 56, line 15 to page 60, line 24; page 61-line 1 to page 64, line 2 and original claim 1 have support for this limitation.

The argument of applicants is not found persuasive, because original claim 1 recites at least 80% identity; Table 7 on page 34 recites 81%-89% identity; other listed pages do not deal with percentage of identity at all. The genus "at least 80% identity" encompasses the subgenus "the at least 95% identity", but the broader genus does not provide support for the narrower subgenus.

”.

Scope of enablement

The amendment has not been entered, thus the rejection of claims 1-3, 2-22, 25, 28, 30-31 for scope of enablement are not withdrawn.

Response to Applicants' arguments

In their current REMARKS page 14 and page 15, Applicants emphasize that

- a) in Example 2 they disclose 3 enzymes having 81% to 89% identity with enzyme B (SEQ ID NO: 8), and
- b) in Example 14 they have disclosed thirteen additional examples of chimeric proteins having identity with SEQ ID NO: 8 as presented below.

Applicants arguments have been fully considered but are found not persuasive.

Regarding a) Enzyme B has 83% identity with enzyme A, 82% identity with enzyme A' and 81 % identity with enzyme A". Although applicants disclosed some particular species with these identities, these species do not enable the full scope of proteins having at least 80% identity with SEQ ID NO: 8 and the desired function. There are many billions of such proteins which differ substantially from SEQ ID NO: 8 and these particular disclosed species.

Regarding b), examples of chimeric proteins obtained by exchanging different portions of enzyme A (SEQ ID NO: 5) and enzyme B (SEQ ID NO: 8) are: A/B1, A/B3, A/B21, A/B22, A/B25, sA21, sA22, sA2, B/A1, B/A2, B/A3, A/B31, and sB. These variants share 85% to 96% identity with enzyme B, as analyzed by BLAST (enclosed in REMARKS) performed by Applicants on the sequences not presented in the disclosure 15. I they were entered now they would be new matter. The information regarding the structure of the chimeric enzymes, as for example given in page 59 of the specification with reference to Fig. 4, is not enabling because it is fragmentary; i.e. it does not identify

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some hybrid structures at all or does not identify all components of some other sequences as those presented in Fig. of the disclosure.

Conclusion

For the above presented reason the amendment has not been entered the claims are rejected as written in the final action of Jan. 3, 2008.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malgorzata A. Walicka, Ph.D., whose telephone number is (571) 272-0944. The examiner can normally be reached Monday-Friday from 10:00 a.m. to 4:30 p.m. If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura AchutamurthyNashaat Nashed, Ph.D. can be reached on (571) 272-1600. The fax phone number for this Group is (703) 305-3014. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionists whose telephone number is (703) 872-9306.

Malgorzata A. Walicka, Ph.D.

Patent Examiner

Art Unit 1652

/Rebecca E. Prouty/
Primary Examiner,
Art Unit 1652